

# TES DEPARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVE	NTOR		ATTORNEY DOCKET NO.
09/224,029	12/31/98	DIMARCO		M	A62-25127-US
-		$\neg$	EXAMINER		
		MM91/0201	·		
JOHN G SHUD HONEYWELL I HONEYWELL P	NC OFFICE	OF GENERAL COUNSEL 8251		ART UNIT	PAPER NUMBER
P O BOX 524 MINNEAPOLIS MN 55440-0524				2841 <b>Date Maile</b> i	D:
					02/01/01

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

•	•	Application No.	Applicant(s)				
•		09/224,029	DIMARCO, MARIO				
	Office Action Summary	Examiner	Art Unit				
		Tuan T Dinh	2841				
	The MAILING DATE of this communication app	pears on the cover sheet with the	correspondence address				
Period fo		VIO OCT TO EVOIDE AMONTH	T(C) EDOM				
THE N - Exten after S - If NO - Failur - Any re	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. It is is signed to the may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a represent of the reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statutely received by the Office later than three months after the mailing department adjustment. See 37 CFR 1.704(b).	136 (a). In no event, however, may a reply be by within the statutory minimum of thirty (30) do not say the apply and will expire SIX (6) MONTHS from the cause the application to become ABANDO	ays will be considered timely. In the mailing date of this communication. INED (35 U.S.C. § 133).				
1)	Responsive to communication(s) filed on 14	November 2000 .					
2a)⊠	•	his action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
4)🖂	Claim(s) 6-20 is/are pending in the application	on.					
	4a) Of the above claim(s) is/are withdra	awn from consideration.					
5)	Claim(s) is/are allowed.						
6)⊠	Claim(s) <u>6-20</u> is/are rejected.						
	Claim(s) is/are objected to.						
8)	Claims are subject to restriction and/	or election requirement.					
Applicati	ion Papers						
•	The specification is objected to by the Exami						
10)⊠	The drawing(s) filed on 12/31/98 is/are object						
11)	The proposed drawing correction filed on	is: a)□ approved b)□ disa	approved.				
12)	The oath or declaration is objected to by the	Examiner.					
	under 35 U.S.C. 🕻 119						
13)	Acknowledgment is made of a claim for forei	ign priority under 35 U.S.C. 🕻 11	9(a)-(d).				
	□ All b)□ Some * c)□ None of:						
	1. Certified copies of the priority docume	nts have been received.					
	2. Certified copies of the priority docume						
* (	<ol> <li>Copies of the certified copies of the pr application from the International E See the attached detailed Office action for a li</li> </ol>	Bureau (PCT Rule 17.2(a)).					
14)							
Attachmei	nt(s)	_					
16) 🔲 No	otice of References Cited (PTO-892)  otice of Draftsperson's Patent Drawing Review (PTO-948)  formation Disclosure Statement(s) (PTO-1449) Paper No	19) Notice of Info	nmary (PTO-413) Paper No(s) rmal Patent Application (PTO-152)				

Art Unit: 2841

## **DETAILED ACTION**

#### **Drawings**

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "ventilation holes" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

#### Specification

The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

The abstract should be re-written in double spaced format.

# Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 8 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification is silent regarding the "ventilation holes".

Art Unit: 2841

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 6, line 4, it is unclear. How does "**one**" faceplate be coupled to each of first and second circuit boards?

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 6, 7, 15, 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Craker (U. S. Patent 4, 716, 497).

As best understood to claims 6 and 15, Craker discloses a circuit integration module assembly and method (10) for insertion into an avionics cabinet (column 1, lines 5-6, 11-20) as shown in figures 1-6 comprising first and second circuit boards (12, 28, column 2, lines 21, 45), a faceplate (22, column 2, line 50), and a connector assembly (not shown, column 1, lines 14-17). The faceplate is coupled to both of the first and second circuit boards (figure 1). The connector assembly is coupled to each of the first and second circuit boards opposing the faceplate. The connector assembly is

Art Unit: 2841

configured to provide an electrical interface between the first and second circuit boards and the cabinet.

As to claim 7, Craker discloses a circuit integration module and as shown in figures 1-6 further comprising spacers (figure 1 mounted between PCB 12 and 28) separating the first and second circuit boards such that a gap between the first and second circuit boards is formed.

As to claims 18-20, Craker discloses the method as shown in figure 1 wherein the module secured to the cabinet by a jack screw (60).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Craker in view of Davies et al (U. S. Patent 4, 736, 274).

As best understood to claim 8, Craker discloses the limitations of the claimed invention as above, except for the gaps are configured to align with ventilation holes in the cabinet. Davies discloses the gaps configured to align with the ventilation holes (P, figure 1A) (column 1, lines 18-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the module of Craker and provide gaps aligning with the

Art Unit: 2841

ventilation holes as taught by Davies because the gaps aligning with the ventilation holes that is used to receive an input coolant air and absorb the heat from the PCBs.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 9-12, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craker in view of McKenzie (U. S. Patent 4, 002, 386).

As to claims 9 and 10, Craker discloses and satisfies the claimed invention, except for the faceplate comprises a handle, and the handle is retractable. McKenzie discloses the module having faceplate that includes a retractable handle (24, figures 2 and 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the module of Craker and provide the faceplate having a retractable handle as taught by McKenzie because the retractable handle can be used to remove the module from the cabinet.

As to claims 11, 12, 16, and 17, Craker discloses the claimed invention, except for showing the module is supported and inserted into slot by at least one guide rail on the cabinet. McKenzie teaches the slots and guide rail (20) on the cabinet (figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the module of Craker and provide the slots and guide rail

Art Unit: 2841

as taught by Davies because the guide rail on the cabinet can be used to insert and remove the card into the cabinet.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craker in view of Tollbom (U. S. Patent 5, 793, 614).

As to claims 13 and 14, Craker discloses and satisfies all of the claimed invention, except for showing the first and second grooves that vare configured to interface with first and second guide rails on the cabinet. Tollbom teaches a module having first and second grooves (49, figure 1) that are interfaced with first and second rails (51) on the cabinet.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the module of Craker and provide the grooves as taught by Tollbom because the grooves on the PCB that can be used easy insertion when the PCB sliding into the cabinet.

# Response to Arguments

Applicant's arguments with respect to claims 6-20 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2841

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T Dinh whose telephone number is 703-306-5856. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 703-308-3301. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-3431 for regular communications and 703-308-3431 for After Final communications.

Art Unit: 2841

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-4900.

**TD** January 26, 2001

Page 8

May